# PHORTICOLEA BOLIVIE, A NEW MYRMECOPHILOUS COCKROACH FROM SOUTH AMERICA. 

(Results Mulford Biological Exploration.-Entomology).

By A. N. Caudell.

Bureau of Entomology, U. S. Department of Agriculture, Washington, D. C.

Among the insects collected in Bolivia by Dr. Wm. M. Mann, entomologist with the Mulford Expedition to South America in 1921-1922, was an apparently undescribed myrmecophilous cockroach belonging to the genus Phorticolea of Bolivar. Although only males were collected there seems to be no doubt that this generic assignment is correct, as the specimens agree in every essential with the characters given for Phorticolea. The size and locality of the new species here described indicate specific distinctness from testacea, the type and only described species of Phorticolea, though the very brief diagnosis of the latter makes comparative characterization impossible.

## Phorticolea boliviae sp. nov.

Description.-Adult male, the opposite sex unknown. General color reddish brown, laterally somewhat darker. Head yellowish with black eyes; vertex evenly convex, not quite concealed beneath the pronotal disk; eyes lateral, subreniform, strongly fasceted and almost or quite three times as long vertically as broad; interocular space fully twice as great as the vertical length of one of the eyes; labial palpus with the terminal segment large, thick, fusiform, about two and one half times as long as the median width and a little more than twice as long as the preceeding segment, which is triangular in shape. Antenna approximately as long as the insect itself and consisting of at least thirty segments ${ }^{1}$; first segment noticeably longer than broad and flattened basally; second and third segments subquadrate, each being about, or a little more than half as long and scarcely

[^0]as thick as the basal one; fourth to fourteenth segments transverse, the fourth to the eleventh or twelfth being two or more times as broad as long, the more basal ones especially broad; fifteenth and sixteenth segments subquadrate and the succeeding ones longer than wide, those towards the apex being twice as long as broad, some of them slightly more.

Pronotum about twice as broad as long, broadly rounded anteriorly, truncate posteriorly, the lateral angles rounded and slightly produced posteriorly, as are also those of the meso- and metathorax, which segments are subequal with each other in length and together barely as long as the pronotum. Organs of flight entirely absent. Legs stout; femora fusiform, broad and flattened, the anterior pair somewhat smaller than the others, the intermediate pair about three times as long as the greatest width and the posterior ones a little stouter, being about two and one half times as long as broad; anterior femora armed beneath with a series of fine setiform hairs, the intermediate and posterior ones armed beneath on both margins with a few very minute spinules in the apical portion, so small as to be scarcely noticeable under moderate magnification, a subapical one on each margin being decidedly larger; all the femora have an apical calcar on the cephalic geniculation; tibix strongly spinose above, the spines in three series, and beneath with mostly finer hair-like spinules, a couple of larger ones in the cephalic margin of the intermediate and posterior ones; tarsi slender, the posterior metatarsus barely shorter than the combined length of the rest of the segments; arolia present, of medium size.

Abdomen anteriorly about as broad as the posterior width of the metanotum, abruptly narrowing posteriorly and scarcely as long as the combined lengths of the three thoracic segments; there are seven dorsal segments visible exclusive of the supraanal plate; lateral margins straight, the posterio-lateral angles sharp and moderately produced posteriorly; the posterior margins of the segments are subtruncate, that of the one preceeding the supraanal plate concave near each side opposite the insertion of the cerci; supraanal plate somewhat more than twice as broad as long, rather narrowly rounded apically; sub-
genital plate broad and rounded apically; cerci short and very broad, tapering from near the base, about twice as long as the greatest width, apically pointed and without distinct segmentation; styles simple, about two thirds as long as the cerci, subcylindrical in shape, rather bluntly pointed apically and the whole organ about four times as long as the basal width.

The entire insect is beset with short pile, the lateral margins of the abdominal segments, supraanal plate, cerci, styles and legs with stout setæ instead of pilose hairs. .

Measurements.-Length, entire insect from front of head to tip of abdomen, about 2.7 mm .; pronotum 1 mm .; posterior femora, 1 mm .; posterior tibia, .8 mm .; posterior tarsus, .7 mm .; posterior metatarsus, .3 mm . Width pronotum posteriorly, 1.8 mm. ; metanotum posteriorly, 2.1 mm .; posterior femora medially, .3 mm .

Type locality.-Cachuela Esperanza, Beni, Bolivia.
Described from three males collected in March, 1922, by Dr. Wm. M. Mann in the joint nests of Crematogaster limata var. parabiotica Forel and Camponotus(Myrmothrix)femoratus Fabr.

Type and paratypes in U. S. National Museum. Catalcgue No. 25757, U. S. N. M.

## VERBENAPIS - A CORRECTION.

In Psyche, vol. 29, p. 162 (August 1922) the name of the genus of bees, Verbenapis is misspelled. Although the error is quite obvious, Professor Cockerell has reminded me that it might receive the attention of nomenclaturists unless corrected. [Editor.]


[^0]:    1One specimen only of the three examined has both antennae apparently complete and here consists of thirty segments. The other two specimens have the antennae more or less mutilated.

